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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,919	08/29/2003	Hideyuki Kaneko	1188-0115P	7975

2292 7590 08/15/2005

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EXAMINER
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ASINOVSKY, OLGA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/650,919

Applicant(s)

KANEKO ET AL.

Examiner

Olga Asinovsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Applicants request to reconsider and reverse the withdrawn status of claim 4 in the restriction requirement has been considered. The argument is that the linking unit Z is only bridging part of the polyolefin P and an X vinyl terminal group in the general formula (I): P-Z-X in claim 1. The linking group Z is claimed under Markush group practice that can be represented by formula (VIII') or (VIII). In Group I, claims 1-3 and 5-9 the linking group Z can be represented by the selected formula (VIII'). Claim 1 of June 07 2005 claims "Z is an ester group (B1) represented by formula (VIII') or a phenylene group (B2) represented by formula (VIII)." The phenylene group (B2) represented by formula (VIII) having a functional group is related to a styrene derivative in claim 4. Claim 4 is depending on claim 1. However, a polyolefin macromonomer in claim 4 having a styrene derivative will require an addition search. In this reason the restriction is still deemed proper and is therefore made FINAL

### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-3 and 5-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. 10/797,144 (Pub.No. 2004/0220346A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the chemical formulation of a polyolefin macromonomer represented by formula (VI) in a multi-branched polymer in claim 5 of Application 10/797,144 is readable in the present claims. The claimed linking group "Z" can be an ester group represented by the formula (VIII'). The claimed "X" is a vinyl group. Polymer P7 in claim 5 of Application 10/797,144 is readable in applicants' claimed P polyolefin. A polyolefin macromonomer (M2) represented by the formula (VI) is a polyolefin chain having an acryloyl or a methacryloyl group at the terminal chain of said polyolefin.

4. The difference is that claims 1-11 of Pub. No. 346 discloses a multi-branched polyolefin having a plurality of P1 polymers chain wherein a polyolefin macromonomer (M2) represented by the general formula (VI) can be selected. Claims 1-11 in Pub. No. '346 does not clearly disclose propylene obtained by a coordination polymerization catalyst containing a transition metal compound. However, it would have been obvious to one ordinary skill in the art to consider that propylene is selected and said propylene is produced by a coordination polymerization catalyst containing a transition metal compound because in light of the fact that any olefin monomer and any polymerizable catalyst can be used in the claims 1-11 in Pub. No. '346 for polyolefin polymerization.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-3 and 5-9 are rejected under 35 U.S.C. 103(a) as being obvious over Kaneko et al Pub. No. 2004/0220346.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2). See paragraphs 3-4 above for the explanation. In addition, a polyolefin macromonomer (M2) represented by the formula (VI) in claim 5 of Pub.No. '346 is readable in applicants claimed P polymer.

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Kaneko discloses that the olefin polymerization catalyst (see [0139]) used in production of macromonomer (M1) may be any catalyst known in the art. However, reference prefers to use a coordination polymerization catalyst containing compounds of groups 4 to 11 transition metals [0117] and [0198]. Also, propylene alone is preferable olefin [0119]. A method of producing a polyolefin having an acryloyl group or a methacryloyl group at the terminal thereof [0181] and [0182] is readable in the present claim 2. The polyolefin having a functional group such as an unsaturated carboxylic acid can be produced by the presence of the coordination polymerization catalyst containing a transition metal compound used in production of the polyolefin chain P7, column 13, [0198], column 6, [0117], column 9 [0136], [0139], [0144], [0145].

6. It would have been obvious to one ordinary skill in the art to consider that propylene is selected and said propylene is produced by a coordination polymerization catalyst containing a transition metal compound based on the teaching Kaneko in the specification [0198], [0117], [0136], [0139], [0144], [0145], and, thereby, obtain the claimed polyolefin macromonomer having (meth)acryloyl terminal group.

This action is not final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*J. A.*

August 09, 2005

Olga Asinovsky  
Examiner  
Art Unit 1711



James J. Seidleck  
Supervisory Patent Examiner  
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